

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 32

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte MASAKI TSUKUDE and  
MASANORI HAYASHIKOSHI

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Appeal No. 96-3040  
Application 08/135,650<sup>1</sup>

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ON BRIEF

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Before JERRY SMITH, FLEMING, and TORCZON, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-8, 30, 31 and 36. Claims 37-54 stand withdrawn from consideration

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<sup>1</sup> Application for patent filed October 14, 1993.

as being directed to a nonelected invention. Claims 9-29 and 32-35 have been indicated by the examiner as containing allowable subject matter. Amendments after final rejection were filed on November 6, 1995 and December 11, 1995. Both of these amendments were entered by the examiner.

The disclosed invention pertains to a voltage supply circuit driven by a power supply voltage for supplying power to internal circuits of an integrated circuit device. A particular feature of the invention is the capability of supplying a stable voltage to the internal circuits regardless of temperature variations occurring within the integrated circuit.

Representative claim 1 is reproduced as follows:

1. A voltage supply circuit driven by a power supply voltage for supplying an output voltage, comprising:

reference voltage generation means driven by said power supply voltage for generating a reference voltage;

driver means receiving said power supply voltage and supplying said output voltage;

dividing means including first and second resistor means for dividing the output voltage supplied by said driver means and supplying a divided output voltage, said first and second resistor means having resistance values of different temperature coefficients; and

comparison means for comparing said divided output voltage supplied by said dividing means and said reference voltage generated by said reference voltage generation means and controlling said driver means based on the difference between said divided output voltage and said reference voltage.

The examiner relies on the following reference:

Cho et al. (Cho)	5,103,158	Apr. 7, 1992
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Claims 1-8, 30, 31 and 36 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the disclosure of Cho.

Rather than repeat the arguments of appellants or the examiner, we make reference to the brief and the answer for the respective details thereof.

#### OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of anticipation relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the disclosure of Cho does fully meet the invention as recited in claims 1, 2, 4-8, 30, 31 and 36. We reach the opposite conclusion with respect to claim 3. Accordingly, we affirm-in-part.

Appellants have nominally indicated that the claims do not stand or fall together, but they have not specifically argued the limitations of each of the claims. To the extent that appellants have properly argued the reasons for independent patentability of specific claims, we will consider such claims individually for patentability. To the extent that appellants have made no separate arguments with respect to some of the claims, such claims will stand or fall with the claims from which they depend. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

For purposes of deciding this appeal, only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to independent claim 1, the examiner has read the invention of this claim on a portion of Cho's Figure 1. More specifically, the examiner reads the reference voltage generation means on Cho's block 50, the driver means reads on transistor 43, the first and second resistor means read on Cho's elements 42 and 41 respectively, and the comparison means reads on block 60 of Cho. This reading establishes a prima facie case of anticipation.

Appellants argue that the element of Cho which performs the comparable driving function of their invention is element 70 rather than transistor 43. When element 70 is taken as the claimed driver means, appellants point out that the recitations of claim 1 are not satisfied [brief, pages 10-11]. This argument is not persuasive because it reads the claim on something other than what the examiner has used to demonstrate anticipation. The question is whether the recitations of the claim are met by any portion of Cho's disclosure, not whether appellants can select a different portion of the prior art disclosure which does not meet the claimed invention.

Appellants argue that claim 1 is written in means plus function form and that the claim must be construed in light of the disclosure [brief, page 9]. Appellants point to driver circuit 30 of their Figure 1 as disclosing the driver means. This driver circuit is seen to be an FET transistor labeled 301 in the figure. The examiner reads the driver means of claim

1 on Cho's transistor 43. Transistor 43 is an FET transistor. We fail to see a structural distinction between these two transistors.

Appellants argue that the dividing means of claim 1 cannot be met by the transistor 42 and constant current source 41 of Cho. With respect to the voltage divider aspect of claim 1, the examiner argues that transistor 42 and current source 41 each have a resistance value associated therewith, and therefore, they serve to divide the voltage between transistor 43 and ground in Cho. Appellants point to resistors R1 and R2 of their Figure 1 as disclosing the voltage divider of claim 1. R1 is shown as a diode connected transistor, and R2 is shown as a schematic resistor. Cho's first resistor is shown as a diode connected transistor, and the second resistor is shown as a current source. A schematic of a resistor does not disclose any specific structure but only that the function of resistance is carried out. We agree with the examiner that any conventional form of resistance, including a current source, would be considered a structural equivalent for the resistor shown in appellants' Figure 1.

Appellants argue that transistor 42 is not equivalent to transistor 501 of their Figure 1 because transistor 501 has its gate coupled to a signal designated as /VDCEP in the figure. Since claim 1 does not recite the manner in which the resistor means are interconnected with the other components of the claim, we see no reason to read such specific structure into the claim under the sixth paragraph of 35 U.S.C. § 112.

With respect to the recitation in claim 1 that the two resistors have different temperature coefficients, the examiner explains that the constant current source 41 of Cho would have a temperature coefficient near zero while the temperature coefficient of transistor 42 would be significant as shown in Cho's Figures 3-5 [answer, pages 4-5]. We agree with the examiner that Cho discloses that the current source remains basically unaffected by temperature changes while the transistors are significantly affected. Thus, we agree with the examiner that transistor 42 and current source 41 of Cho act as two resistor means that have different temperature coefficients. Appellants' argument regarding the similarity of the temperature coefficients of elements 40 and 50 of Cho is not persuasive because it is elements 42 and 41 of Cho which are critical to the claim, not elements 40 and 50.

For all the reasons just discussed, we conclude that independent claim 1 is fully met by the disclosure of Cho. Since independent claims 30 and 36 are basically argued in the same manner as claim 1, these claims are also fully met by the disclosure of Cho.

With respect to claims 2 and 31, appellants argue that there is no disclosure in Cho that current source 41 would have a smaller temperature coefficient than transistor 42. As just noted above, however, the current source of Cho has a temperature coefficient near zero while the temperature coefficient of transistor 42 is significant. Therefore, these claims are anticipated by Cho. With respect to claim 6, appellants argue that Cho does

not apply the output voltage to an internal circuit as claimed [brief, page 14]. The examiner argues that the internal circuit is a recitation of “intended use” only [answer, page 7]. We find internal voltage generating circuit 70 of Cho to meet the broad recitation of an internal circuit. With respect to claim 8, appellants argue that there is no disclosure in Cho of a buffer means as claimed. The examiner responds that circuit 70 of Cho is a buffer means. We agree with the examiner that circuit means 70 of Cho meets the recitation of a buffer means. Dependent claims 4, 5 and 7 are not separately argued by appellants so that they fall with independent claim 1.

Claim 3 recites that the first temperature coefficient is positive and the second temperature coefficient is negative. Despite the examiner’s previous assertions that the temperature coefficient of current source 41 is near zero, the examiner argues that “with the wide range of transistors disclosed for element 41, is clear that such can have a ‘temperature coefficient’ opposite to that of element 42, provided that the temperature coefficient of 42 remains dominant to provide the overall temperature coefficient” [answer, page 7]. The examiner’s position essentially is that the conditions of claim 3 could inherently occur in the Cho device even though such condition may not be specifically disclosed in the reference.

If a prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if that element is “inherent” in its disclosure. To establish

inherency, the extrinsic evidence “must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). “Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” Id. at 1269, 20 USPQ2d at 1749 (quoting In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981).

We find the examiner’s conclusion that the temperature coefficients of Cho’s transistor 42 and current source 41 could be of opposite polarity to be based on pure speculation which is not supported anywhere within the disclosure of Cho. Therefore, we do not sustain the rejection of claim 3.

In summary, we have sustained the examiner’s rejection under 35 U.S.C. § 102 with respect to claims 1, 2, 4-8, 30, 31 and 36, but we have not sustained the rejection with respect to claim 3. Therefore, the decision of the examiner rejecting claims 1-8, 30, 31 and 36 is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

Appeal No. 96-3040  
Application 08/135,650

JERRY SMITH  
Administrative Patent Judge

MICHAEL R. FLEMING  
Administrative Patent Judge

RICHARD TORCZON  
Administrative Patent Judge

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